

Investment Office

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May 15, 2006

AGENDA ITEM 6b

TO: MEMBERS OF THE INVESTMENT COMMITTEE

I. SUBJECT: Alpha Currency Initiative

II. PROGRAM: Currency Overlay

III. RECOMMENDATION: Allow Staff to proceed with a pilot program for an

Internal Alpha Currency Overlay Portfolio with policy changes to be brought before the Policy Subcommittee

Wilshire's Opinion Letter is Attachment 1

IV. ANALYSIS:

Background

- The currency overlay program (the Program) was incepted in 1991. The primary objective is to provide risk control, or a reduction in the volatility of the returns from the CalPERS' international equity investments while return is given a secondary consideration. This remains to this day.
- At the March 13, 2006 meeting staff presented Currency Strategic Plan as an information only item. It is Attachment 2 (and contains a more detailed history of the Program). At that meeting Staff promised to provide details of the next steps. This item addresses that promise.
- As of March 31, 2006 the size of the Program was approximately \$10.7 billion.

Case for Active Currency Management.

Attachment 3 is representative of a body of literature making the case for Active Currency Management.

The critical issues include:

- 1. Large portions of currency trading are done by those who do not trade for profit. Examples include central banks, hedgers, and tourists.
- 2. Currency values can deviate from "fundamental value" for extended periods. This is due in part to a lack of consensus on the determination of "fundamental value".
- 3. Empirical evidence exists that currency managers on average add value.
- 4. Active management styles that Staff intends to pursue including:
 - a) Fundamental
 - b) Technical
 - c) Interest rate (or carry)
 - d) Dynamic hedging (a volatility strategy) (These are the strategies outlined in Staff's March presentation found In Attachment 2).

Existing Program

The existing Program consists of the following:

- 1. Externally managed quasi-active portfolios
- 2. Internally managed passive hedge portfolio (inception 2001)

All portfolios are managed to a fully hedged (100% hedged) benchmark (an asymmetrical benchmark). The primary goal is risk reduction.

The program has been successful in reducing risk.

Remarkably the internally managed passive portfolio added 43 basis points of incremental return, net of costs, since its 2001 inception.

The issue of adding value is now being pursued, with the Internal Alpha Currency Overlay Portfolio.

Planned Changes

1. Keep the existing program as is, including the benchmark.

- 2. Add an additional portfolio The Internal Alpha Currency Overlay Portfolio, which would be identical in every respect to the internal passive program EXCEPT:
 - a) it would be actively managed, that is to say that positions could vary away from a fully hedged benchmark, which is the neutral position.
 - b) active management shall be achieved through increasing the tracking error (active management risk) around the benchmark
 - c) size initially would be very small, less than 1% of the Program
 - d) the Internal Alpha Currency Overlay Portfolio would only grow commensurate with results.

How to Implement the Internal Alpha Portfolio

A. Initial Size

 The initial size of the Internal Alpha Portfolio will be less than 1% of the Currency Overlay Program.

B. Performance Objective

- The return goal for the portfolio is modest. The objective of the Internal Alpha Portfolio is to add incremental currency return, much like a "core plus" concept; namely a modest outperformance of the benchmark.
- The empirical evidence of the Internal Passive Portfolio shows that it outperformed the benchmark by 43 basis points since inception. (This may be seen in Attachment 2 of "CalPERS Currency Strategy".)
- The expected range for the information ratio is to be 0.3 to 0.75 for the Internal Alpha Currency Overlay Portfolio.
- The internal active portfolio is expected to grow commensurate with results. Staff would come back to the Policy Subcommittee to outline allowable ranges for the size and appropriate risk assessment before any significant expansion of the portfolio.

C. Strategy Development

- Staff is presently developing quantitative models for the four strategies.
- Back testing shall provide expected return data, helping to establish targeted returns and risk parameters.

D. Resources

- The implementation of positions to match the benchmark or neutral position of fully hedged is exactly as the existing Internal Passive Portfolio.
- Initially no systems or further execution skills are required.
- No additional staff requirement is expected initially.

E. Benchmark to Remain, Guidelines to Change

The policy for the Program shall not change with respect to the benchmark. It shall remain 100% fully hedged benchmark.

However, for the Internal Alpha Currency Overlay Portfolio the following amendments:

1) Investment Objective

Modest return and tracking error budget, with an anticipated information ratio goal of 0.3 to 0.75.

- 2) Investment Approach and Parameters
 - a) Development of quantitative models to support active management of the four strategies:
 - Fundamental
 - Technical
 - Interest rate, and
 - Volatility
 - b) Allow the Internal Alpha Currency Overlay Portfolio to have a range of hedging opportunity from no hedge to double the hedge. This allows for symmetrical positions around the fully hedged neutral benchmark.

Risk Management Viewpoint

The CalPERS Investment Office Risk Management/Asset Allocation Unit was requested to assess the risk to CalPERS overall portfolio.

There are several layers to the risk management process. There is the active versus passive management risk. The Internal Alpha Currency Overlay Portfolio will add active risk. However, adding the Internal Alpha Currency Overlay Portfolio reduces the overall CalPERS currency exposure and hence currency risk. The Risk Management Unit's findings are detailed in Attachment 4. Their conclusion is quoted below.

"Summary Conclusion: An internally managed active currency portfolio of the initial size proposed would have essentially no effect on the forecasted total risk and active risk of the fund or the asset class. Because this proposal only allows for an incremental increase in the amount of foreign currencies hedged back to the US dollar, the overall exposure of the fund to foreign currencies can only be reduced. If the program were to be substantially extended, the currency risk within the fund would be reduced, and thus the total risk of the fund could decline."

Proposed Changes Summary

Staff is recommending an incremental approach to updating the Program. The intention is to build upon the competence that has been developed internally and to prudently move forward to more fully exploit that competence. The following table summarizes the proposed changes to the internal currency overlay program.

The Currency Overlay Program as Proposed

Portfolio	Size	% of Program	Information Ratio	Policy Change
Internal Passive	3.1 billion	29%	0	No
Internal Active*	100 million*	1%*	0.3 to 0.75*	Yes*

^{*}Proposed

Next Steps

- 1. Develop quantitative models to implement and back test the combined four strategies.
- 2. Develop investment policy changes to be brought before the Policy Sub-Committee.
- 3. Keep Investment Committee apprised of developments before "going live".

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V. STRATEGIC PLAN:

Monitoring and review of the Currency Overlay Program is consistent with CalPERS Strategic Plan, Goal VIII: Manage the risk and volatility of assets and liabilities to ensure sufficient funds are available, first, to pay benefits and second, to minimize and stabilize contributions and Goal IX: Achieve long-term, sustainable, risk adjusted returns.

VI. RESULTS/COSTS:

Costs associated with CalPERS currency overlay program are the external manager fees, staff salaries and support systems. The addition of the Internal Alpha Currency Overlay Portfolio will use existing resources. The changes envisioned are suggested to improve the cost effective return on CalPERS portfolio.

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